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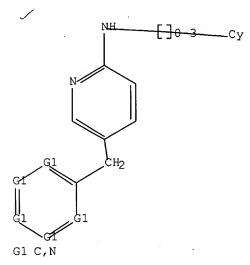
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L1 STRUCTURE UPLOADED

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Structure attributes must be viewed using STN Express query preparation.

=> s l1 sam

L2 8 SEA SSS SAM L1

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L3 122 SEA SSS FUL L1

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=> s 13

L4 17 L3

=> dis 15 1-6 bib abs hitstr

L5 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS .on STN

AN 1999:83141 CAPLUS Full-text

DN 130:209581

TI Acid-catalyzed N-debenzylation of (benzylamino)pyridines

AU Kowalski, P.; Majka, Z.; Kowalska, T.

CS Institute of Organic Chemistry and Technology, Cracow University of Technology, Krakow, 31-133, Pol.

SO Chemistry of Heterocyclic Compounds (New York) (Translation of Khimiya Geterotsiklicheskikh Soedinenii) (1998), 34(6), 740-741 CODEN: CHCCAL; ISSN: 0009-3122

PB Consultants Bureau

DT Journal

- LA English
- OS CASREACT 130:209581
- AB Several 2- and 4-(benzylamino)pyridines, 2,6-bis(benzylamino)pyridine, and 2-(benzylamino)quinoline underwent N-debenzylation in 95% H2SO4. Yields were 73-85%. The reaction failed with 3-(benzylamino)pyridine.
- IT 137002-80-3

RL: RCT (Reactant); RACT (Reactant or reagent)
 (acid-catalyzed N-debenzylation of)

- RN 137002-80-3 CAPLUS
- CN 2-Pyridinamine, N,5-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L5 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 1998:545594 CAPLUS Full-text
- DN 129:148914
- TI Preparation of 2-amino-4-aryl-5-arylmethyl-5-cyclopentyl-3-hydroxymethylpyridines and related compounds for treatment of arteriosclerosis.
- IN Schmeck, Carsten; Brandes, Arndt; Loegers, Michael; Schmidt, Gunter; Bremm, Klaus-Dieter; Bischoff, Hilmar; Schmidt, Delf; Schuhmacher, Joachim
- PA Bayer A.-G., Germany
- SO Ger. Offen., 22 pp.

CODEN: GWXXBX

- DT Patent
- LA German

FAN.CNT 1

r AN.	PATENT NO. DE 19704243					KIND DATE			APPLICATION NO.						DATE				
ΡI	DE	1970	4243			A1		1998	0806		DE 1	997-	1970	1243		19	39702	205 <	
																		123 <	
		9834			•	A1												123 <	
		W:	AL,					BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GW,	HU,	ID,	IL,	IS,	JP,	KE,	KG,	
			KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	
			NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	
			,	•				YU,											
		RW:							SZ,										
									MC,		PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	
•					•				TD,					_					
		9862									AU 1	998-	6212	3		15	<i>3</i> 980.	123 <	
		7301								BR 1998-7181						1.	0000	100	
	EP	9737																123 <	
		R:								GB,	GR,	IT,	, גע	LU,	ΝL,	SE,	MC,	PT,	
		0000	•		-			RO ·	0928		1111 2	000-	1000			. 1	9980:	123	
		2000										998-				-	9980:		
	NZ 337011				Α.			0427											
•	JP 2001510478														19980123				
		NO 9903738																	
		BG 103631				Α			1130							_	9990		
	MX 9907244					Α		20000131			1 MX 1999-7244					19990805 <			

PRAI DE 1997-19704243 A 19970205 WO 1998-EP362 W 19980123

OS MARPAT 129:148914

GI

$$\begin{array}{c} A \\ D \\ \longrightarrow \\ N \\ NR2R3 \end{array} \qquad \qquad F_{3}C \\ \begin{array}{c} \\ \\ \\ \end{array} \qquad \qquad \\ \end{array} \qquad \qquad \qquad \\ II$$

Title compds. [I; A = (substituted) aryl; D = (substituted) aryl, R6L, etc.; R6 = (substituted) cycloalkyl, aryl, (benzocondensed) mono-, di-, or tricyclic heterocyclyl; L = (substituted) alkyl, alkenyl; E = cycloalkyl, (substituted) alkyl; R1 = hydroxyalkyl; R2, R3 = H, Ph, PhCH2, cycloalkyl, alkyl, acyl, aminocarbonyl; R2R3N = 5-7 membered (unsatd.) (benzocondensed) (substituted) heterocyclyl], were prepared Thus, title compound (II) inhibited cholesteryl ester transfer protein with IC50 = 6 + 10-8 M.

IT 210981-29-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-amino-4-aryl-5-arylmethyl-5-cyclopentyl-3-hydroxymethylpyridines and related compds. for treatment of arteriosclerosis)

RN 210981-29-6 CAPLUS

CN 3-Pyridinemethanol, 6-cyclopentyl-2-(cyclopropylamino)-4-(4-fluorophenyl)-5-[[4-(trifluoromethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

IT 210981-42-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2-amino-4-aryl-5-arylmethyl-5-cyclopentyl-3-hydroxymethylpyridines and related compds. for treatment of arteriosclerosis)

RN 210981-42-3 CAPLUS

CN 2-Pyridinamine, 6-cyclopentyl-4-(4-fluorophenyl)-N-(phenylmethyl)-3-

[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]-5-[[4-(trifluoromethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F_3C & & \\ \hline \\ CH_2 & NH-CH_2-Ph \\ \hline \\ O & \\ \end{array}$$

L5 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1994:243760 CAPLUS Full-text

DN 120:243760

TI Action of benzyl chloride on 2-(dimethylamino)pyridine and 2-benzoylaminopyridine

AU Kowalski, Piotr

CS Inst. Org. Chem. Technol., Cracow Univ. Technol., Krakow, 31-155, Pol.

SO Journal of Heterocyclic Chemistry (1994), 31(1), 245-7 CODEN: JHTCAD; ISSN: 0022-152X

DT Journal

LA English

AB The results of the reaction of 2-(dimethylamino)pyridine and 2(benzoylamino)pyridine with benzyl chloride proved that benzyl chloride did
not undergo direct reaction with the pyridine ring to form a C-benzyl product.

IT 137002-80-3P, 2-Pyridinamine, N,5-bis(phenylmethyl)-RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, by benzylation of pyridinamine via ionic intermediates)

RN 137002-80-3 CAPLUS

CN 2-Pyridinamine, N,5-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1994:163916 CAPLUS Full-text

DN 120:163916

TI Electrophilic benzylation of the pyridine ring. Action of benzyl chlorides on 2-amino and 2-benzylaminopyridine

AU Kowalski, Piotr

CS Inst. Org. Chem. Technol., Polytech. Univ., Krakow, 31-155, Pol.

SO Journal of Heterocyclic Chemistry (1993), 30(2), 403-8 CODEN: JHTCAD; ISSN: 0022-152X

DT Journal

LA English

OS CASREACT 120:163916

The reaction of 2-aminopyridine as well as 2-benzylaminopyridine hydrochloride with benzyl chlorides used in molar ratio of 1:2 and 1:1 resp. and carried out 15 250° leads via 2-benzylamino-5- benzylpyridines to 2-amino-5- benzylpyridines as the final products. The formation of 2-benzylamino-5- benzylpyridines did not occur in the direct C-benzylation reaction of the 2-benzylaminopyridine ring with the use of benzyl chloride. Its formation takes place via the intermediate state of 2-(N,N-dibenzylamino)pyridinium and 1-benzyl-2-benzylaminopyridinium chlorides for which the solvent separated ionmol. form is proposed. Interaction of the ingredients of the intermediate state i.e., benzyl cation and 2-benzylaminopyridine, leads to an electrophilic mechanism to the formation of 2-benzylamino-5-benzylpyridine hydrochlorides. Thermolysis of the aminomethylene bond in 2-benzylamino-5-benzylpyridine hydrochlorides leads to the final 2-amino-5-benzylpyridines.

IT 137002-80-3P 153373-97-8P 153373-98-9F 153374-01-7P 153374-02-8P 153374-05-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 137002-80-3 CAPLUS

CN 2-Pyridinamine, N,5-bis(phenylmethyl) - (9CI) (CA INDEX NAME)

RN 153373-97-8 CAPLUS

CN 2-Pyridinamine, N,5-bis[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2\text{-NH} \\ \text{Ne} \end{array}$$

RN 153373-98-9 CAPLUS

CN 2-Pyridinamine, N,5-bis[(4-chlorophenyl)methyl]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2-NH CH_2 CH_2 CH_2

RN 153374-01-7 CAPLUS

CN 2-Pyridinamine, N-[(4-methylphenyl)methyl]-5-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 153374-02-8 CAPLUS

CN 2-Pyridinamine, 5-[(4-methylphenyl)methyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 153374-05-1 CAPLUS

CN 2-Pyridinamine, N,5-bis(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L5 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1991:632036 CAPLUS Full-text

DN 115:232036

TI Electrophilic benzylation of 2-aminopyridine ring

AU Kowalski, Piotr

CS Inst. Org. Chem. Technol., Politech. Univ., Krakow, 31-155, Pol.

SO Journal of Heterocyclic Chemistry (1991), 28(4), 875-9

CODEN: JHTCAD; ISSN: 0022-152X

DT Journal

LA English

GΙ

Electrophilic benzylation of 2-aminopyridines I (R = H, 3-Me, 5-Me, R1 = R2 = H) gave various benzylated derivs. Thus, I (R = R1 = R2 = H) reacted with PhCH2Cl to give I (R = R1 = H, R2 = CH2Ph; R = H, R1 = 5-CH2Ph, R2 = CH2Ph; R = R2 = H, R1 = 5-CH2Ph) and bis(aminopyridyl)phenylmethane II (R = H). I (R = 3-Me, R1 = R2 = H) reacted with PhCH2Cl to give I (R1 = 5-CH2Ph, R2 = CH2Ph; R1 = 5-CH2Ph, R2 = H) and II (R = Me). Similarly, I (R = 5-Me, R1 = R2 = H) gives I (R1 = H, R2 = CH2Ph; R1 = 3-CH2Ph, R2 = CH2Ph; R1 = 3-CH2Ph, R2 = H).

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and electrophilic benzylation of hydrochloride salt of)

RN 137002-80-3 CAPLUS

CN 2-Pyridinamine, N,5-bis(phenylmethyl) - (9CI) (CA INDEX NAME)

IT 137002-81-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 137002-81-4 CAPLUS

CN 2-Pyridinamine, 3-methyl-N,5-bis(phenylmethyl)- (9CI) (CA INDEX NAME)

L5 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1988:94401 CAPLUS Full-text

DN . 108:94401

TI Preparation and formulation of 3-hydroxypyridines useful as histamine H1-antagonists

IN Cooper, David Gwyn; Miles, Peter Donald; Young, Rodney Christopher

PA Smith Kline and French Laboratories Ltd., UK

SO Eur. Pat. Appl., 47 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

TAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 244201 EP 244201	A2 A3	19871104 19881005	EP 1987-303741	19870428 <
	EP 244201	B1	19900926		
	R: AT, BE, CH, JP 62277359	DE, ES	, FR, GB, G 19871202	R, IT, LI, LU, NL, SE JP 1987-107930	19870428 <
	AT 56957	T	19901015	AT 1987-303741	19870428 <
	ZA 8703118	А	19880224	ZA 1987-3118	19870430 <
	DK 8702252	A	19871103	DK 1987-2252	19870501 <
	AU 8772425	A	19871105	AU 1987-72425	19870501 <
	US 4764519	A	19880816	US 1987-45106	19870501 <
	US 4863933	А	19890905	US 1988-185714	19880425 <
PRAI	GB 1986-10867	Α	19860502		
	EP 1987-303741	А	19870428		•
	US 1987-45106	А3	19870501		
OS GI	MARPAT 108:94401				

Title compds. I (R = 2-, 3-, or 4-pyridyl (oxide), (un)substituted N-C1-4 alkylpyridone; R1 = H or with R2 = (CH2)n where n = 2-4; R2 = H, C1-4 alkyl, halo, H2N; R3 = H0, phosphate; R4 = H, C1-4 alkyl, halo, H2N; m = 2-4; and their salts, are prepared 2-Chloro-3-nitro-5-(3- pyridylmethyl)pyridine-HCl prepared in 4 steps from 5-bromo-2- methoxypyridine, was substituted with 4-(5-bromo-3-methyl-2- pyridyl)butylamine to give the nitro(pyridylmethyl)pyridine derivative which was reduced to the amino derivative, this in turn was diazotized to the triazolopyridine derivative which was decomposed to give I (R = 3-pyridyl; R1 = H; R2 = Me; R3 = H0; R4 = Br; m = 4) (II). In tests in vitro and in vivo, II inhibited histamine-mediated guinea pig ileal spasm and bronchoconstriction. An injectable solution (1-5% weight/weight) in vials containing each 2 mL, comprised II and H2O.

IT 112860-46-5P 112878-49-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and diazotization of, triazolopyridine by)

RN 112860-46-5 CAPLUS

CN 2,3-Pyridinediamine, 5-(3-pyridinylmethyl)-N2-[3-(5,6,7,8-tetrahydro-8-quinolinyl)propyl]- (9CI) (CA INDEX NAME)

RN 112878-49-6 CAPLUS

CN 2,3-Pyridinediamine, N2-[3-(5-bromo-3-methyl-2-pyridinyl)propyl]-5-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

IT 112860-45-4P 112860-52-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)

· (preparation and reduction of)

RN 112860-45-4 CAPLUS

CN 8-Quinolinepropanamine, 5,6,7,8-tetrahydro-N-[3-nitro-5-(3pyridinylmethyl)-2-pyridinyl]- (9CI) (CA INDEX NAME)

112860-52-3 CAPLUS RN

CN pyridinyl] - (9CI) (CA INDEX NAME)

112860-47-6P 112860-54-5P 112860-56-7P ΙT

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as histamine antagonist)

RN

112860-47-6 CAPLUS 3-Pyridinol, 5-(3-pyridinylmethyl)-2-[[3-(5,6,7,8-tetrahydro-8-CN quinolinyl)propyl]amino]- (9CI) (CA INDEX NAME)

RN

CN 3-Pyridinol, 2-[[3-(5-bromo-3-methyl-2-pyridinyl)propyl]amino]-5-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RN 112860-56-7 CAPLUS

CN 3-Pyridinol, 5-(3-pyridinylmethyl)-2-[[2-(5,6,7,8-tetrahydro-8-quinolinyl)ethyl]amino]- (9CI) (CA INDEX NAME)

=> s 14 not 15 L6 11 L4 NOT L5

=> dis 16 1-11 bib abs fhitstr

L6 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:886963 CAPLUS Full-text

DN 145:299522

TI Pharmaceutical combination of Bcr-Abl and RAF inhibitors

IN Manley, Paul W.

PA Novartis AG, Switz.; Novartis Pharma GmbH

SO PCT Int. Appl., 31pp. CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

r An.	. GNI	Τ.																
	PA'	TENT	NO.			KIND DATE			APPLICATION NO.						DATE			
							_								- -			
ΡI	WO	2006	0897	81		A1 20060831					WO 2	006-1	EP17	40		20060224		
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	ΓI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	ΚP,	KR,
			ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG.	SK.	SL.	SM.	SY,	TJ,	TM,	TN,	TR.	TT.	TZ.	UA.	UG,	US,	UZ,	VC,

VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM

PRAI US 2005-656340P P 20050225 '
OS MARPAT 145:299522
GI

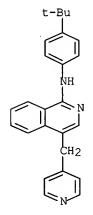
AB The invention provides a pharmaceutical combination comprising: (a) a pyrimidylaminobenzamide compound, and (b) a RAF kinase inhibitor and a method for treating or preventing a proliferative disease using such a combination, wherein compound (a) has the following general Formula: (I), with R1, R2, and R4 defined in claims.

IT 258851-00-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical combination of Bcr-Abl and RAF inhibitors)

RN 258851-00-2 CAPLUS

CN 1-Isoquinolinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-(4-pyridinylmethyl)-(9CI) (CA INDEX NAME)



RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:513675 CAPLUS Full-text

DN 145:34151

- TI Combinations of JAK kinase inhibitors
- IN Cooke, Nigel Graham; Manley, Paul W.
- PA Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.

P

SO PCT Int. Appl., 61 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
PI	WO 2006056399 WO 2006056399					A2 20060601 A3 20060831			7	WO 20	005-1	EP12	480		20	0051	122	
	W: AE, AG, AL, CN, CO, CR, GE, GH, GM		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
			KZ, MZ,	LC, NA,	LK, NG,	LR, NI,	LS, NO,	LT, NZ,	LU, OM,	LV, PG,	LY, PH,	MA, PL,	MD, PT,	MG, RO,	MK, RU,	MN, SC,	MW, SD,	MX, SE,
		RW:	VN,	YU,	ZA,	ZM,	ZW	TJ,										
			CF, GM,	CG, KE,	CI, LS,	CM,	GA, MZ,	MC, GN, NA, TM	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,

20041124

The invention provides a pharmaceutical combination comprising (a) at least one agent selected from Bcr-Abl, Flt-3, FAK and RAF kinase inhibitors; and (b) at least one JAK kinase inhibitor, and a method for treating or preventing a proliferative disease using such a combination. A preferred embodiment of the invention is the combination of a RAF inhibitor, e.g., (4-tert-butylphenyl)-(4-pyridin-4-yl-methyl-isoquinolin-1- yl)amine or [4,7']bi-isoquinolinyl-1-yl-4-(tert-butylphenyl)amine, and a JAK kinase inhibitor, such as PNU 156804 or WHI-P 131 for the treatment of myelomas, especially multiple myeloma.

IT 258851-00-2

PRAI US 2004-630713P

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combinations of JAK kinase inhibitors with other protein kinase inhibitors for treatment or prevention of proliferative disease)

RN 258851-00-2 CAPLUS

CN 1-Isoquinolinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-(4-pyridinylmethyl)-(9CI) (CA INDEX NAME)

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10/766,181 (RCE)
     ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
L6
     2004:878558 CAPLUS Full-text
ΑN
DN
     141:360667
TI
     Methods for treating and diagnosing diseases having an aberrant MAP kinase
     signaling pathway, such as proliferative diseases, and for monitoring the
     effectiveness of treatment of proliferative diseases
IN
     Hu, Ping; Wang, Yingqi Karen; Batt, David Bryant
     Novartis Ag, Switz.; Novartis Pharma GmbH
PA
     PCT Int. Appl., 37 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND
                                DATE
                                          APPLICATION NO.
                                                                   DATE
                        ---- · ---
     WO 2004090545
                         A2
                                           WO 2004-EP3877
PΙ
                                20041021
                                                                   20040413
     WO 2004090545
                         A3
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         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
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             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     AU 2004227103
                          A1
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                                            AU 2004-227103
                                                                   20040413
     CA 2522333
                          Α1
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     EP 1616191
                         A2 . 20060118
                                            EP 2004-726981
                                                                   20040413
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
     BR 2004009409
                        Α
                               20060425 BR 2004-9409
                                                                   20040413
     CN 1784602
                         Α
                                20060607
                                          CN 2004-80011895
                                                                   20040413
     JP 2006525962.
                          T
                                20061116
                                           JP 2006-505103
                                                                   20040413
PRAI US 2003-462723P
                         P
                                20030414
     WO 2004-EP3877
                        W
                                20040413
AΒ
     The present invention relates to phosphoproteins useful as biomarkers for
     patients.
ΙT
     258851-00-2, BPMI
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
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identifying and treating patients suffering from diseases characterized by an aberrant MAP kinase signaling pathway, for example proliferative diseases like certain cancers, monitoring the efficacy of treatment of patients having the disease by administering Raf kinase inhibitors and diagnosing the disease in

THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Raf inhibitor; phosphoproteins as biomarkers in treatment and diagnosis of diseases having aberrant MAP kinase signaling pathway, such as proliferative diseases, and for monitoring treatment effectiveness)

258851-00-2 CAPLUS RN

1-Isoquinolinamine, N-[4-(1,1-dimethylethyl)phenyl]-4-(4-pyridinylmethyl)-(9CI) (CA INDEX NAME)

OS GI

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ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
L6
     2004:780541 CAPLUS Full-text
ΑN
     141:295873
DN
     Preparation of N-aryl (heteroarylalkyl) isoquinolineamines as inhibitors of
ΤI
     mutant and wild-type MAP kinases for the treatment of cancer
     Batt, David Bryant; Bold, Guido; Kim, Sunkyu; Ramsey, Timothy Michael;
IN
     Sabio, Michael Lloyd
     Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
PΑ
     PCT Int. Appl., 85 pp.
SO ·
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                                            APPLICATION NO.
                                                                    DATE
                         KIND
                                DATE
     _____
                                                                    20040310
ΡI
     WO 2004080464
                         A1
                                20040923
                                            WO 2004-EP2460
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
             SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
     AU 2004218914
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                                20040923
                                             CA 2004-2518530
     EP 1603566
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                                20051214
                                            EP 2004-718960
                                                                    20040310
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
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     CN 1758910
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     JP 2006519807
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                                20060831
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                                                                    20040310
                                20051209
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                                                                    20051010
     NO 2005004647
                          Α
                         P
PRAI US 2003-453624P
                                20030311
                                20040310
     WO 2004-EP2460
                          Α
     MARPAT 141:295873
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$$X-J-Y$$
 $A-B$
 $C(Q)$ P
 $C(Q)$ P

Compds. I [A, B, D, E, T = CH, N (independent; between one and three of A, B, AΒ D, E, or T are N); G = alkylene, CH2O, CH2S, CH2NH, SO2, O, S, NR; J = (CHR)n; R = H, alkyl; X = Y, RN, O, S; Y = H, (un)substituted alkyl, aryl, heteroaryl, cycloalkyl; Z = halogen, hydroxy, nitro, cyano, carboxy, (un)substituted amino, alkoxy, alkylcarbonyloxy, alkoxycarbonyl, etc.; m = 0-4; n, p = 0-2], particularly N-aryl (azaheteroarylalkyl)isoquinolineamin es such as II, are prepared as inhibitors of MAP kinases for use in the treatment of cancers; I are especially useful in the treatment of cancers possessing mutant Raf kinases, such as melanoma. 2-(Cyanomethyl)benzoic acid is esterified with DMF di-Me acetal to give its Me ester which undergoes condensation with 4pyridinecarboxaldehyde followed by reesterification of the benzoic acid to yield 2-(2-methoxycarbonylphenyl) - 3-(4-pyridinyl)acrylonitrile (III); hydrogenation and concomitant cyclocondensation of III yields 4-(4pyridylmethyl)-1-isoquinolinone which is then chlorinated to yield 1-chloro-4-(4-pyridinylmethyl)isoquinoline (IV). Condensation of IV with 3,5dimethylaniline yields II. Compds. of the invention inhibit either wild-type .C-Raf with IC50 values between 0.01 μM and 3.5 $\mu M,$ wild-type B-Raf with IC50 values between 0.03 μM and 3.7 μM , or a mutant B-Raf (V599E) with IC50 values between 0.01 μM and 3.4 μM (no data).

IT 258850-90-7P

RN

CN

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of mutant and wild-type MAP kinase-inhibiting N-aryl (heteroarylalkyl)isoquinolineamines as potential anticancer agents) 258850-90-7 CAPLUS

1-Isoquinolinamine, N-(3,5-dimethylphenyl)-4-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L6 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2004:113527 CAPLUS Full-text
- DN 140:163891
- TI Preparation of substituted pyridines and pyridazines with angiogenesis inhibiting activity for pharmaceutical use as antitumor agents
- IN Duma's, Jacques P.; Boyer, Stephen James; Dixon, Julie A.; Joe, Teddy Kite;
 Kluender, Harold C. E.; Lee, Wendy; Nagarathnam, Dhanapalan; Sibley,
 Robert N.; Su, Ning
- PA Bayer Pharmaceuticals Corporation, USA
- SO U.S., 60 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
ΡI	US 6689883	B1	20040210	US 2000-672294	20000928		
	US 2004092740	A1	20040513	US 2003-720702	20031124		
PRAI	US 1999-287595P	P	19990928				
	US 2000-672294	A3	20000927				
os	MARPAT 140:163891						
GI							

Fused ring systems with a pyridine or pyridazine subunit, such as I [X = connecting group, such as O, S, NH, etc.; Y = connecting group, such as O, S, CH2O, CH2S, NH, OCH2, SCH2, SO, SO2, etc.; Z = CH, N; R1R2 = fused ring, such as CH:CHCH:CH, CH:CHS, CH:CHO, CH:CHNH, N:CHNH, N:NNH, etc.; R3, R4 = aryl, heteroaryl, etc.; XR4 = nitrogen bound heterocyclyl, such as 1-indolinyl], with angiogenesis inhibiting activity were prepared for pharmaceutical use as antitumor agents. Thus, substituted isoquinoline II was prepared in a 3 step sequence which included bromination of isocarbostyril to form 1,4-dibromoisoquinoline in 96% yield, followed by monoamination with 4-chloroaniline to give 4-bromo-N-(4-chlorophenyl)-1- isoquinolinamine in 64.4% yield, and subsequent reaction with 4-mercaptopyridine to give II in 19% yield. The prepared compds. were tested for KDR receptor inhibition.

II

IT 258850-91-8P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of substituted pyridines and pyridazines with angiogenesis inhibiting activity for pharmaceutical use as antitumor agents)

RN 258850-91-8 CAPLUS

CN 1-Isoquinolinamine, N-(4-chlorophenyl)-4-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RE.CNT 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:570820 CAPLUS Full-text

DN 139:111640

TI Anti-angiogenesis combination therapies using KDR inhibitor pyridazine or pyridine derivatives

IN Adams, Paul E.; Boyer, Stephen J.; Dumas, Jacques; Elting, James J.;
Kluender, Harold C. E.

PA Bayer Corporation, USA; Bayer Pharmaceuticals Corporation

SO PCT Int. Appl., 127 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

FAN.	PATENT	NO.		KIND DATE			APPLICATION NO.						DATE				
PI	WO 2003				A2		2003		1	WO 2	002-	US41	145		20	0021	220
	W:	AE,	AG,	AL,	AM,	AT,	AU, DK,	AZ,									
		LS,	LT,	LU,	LV,	MA,	IN, MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
	Dri	UA,	UG,	US,	UZ,	VC,	SD, VN,	YU,	ZA,	ZM,	ZW	•	·				
	RW:		ΚΖ,	MD,	RU,	ТJ,	MZ, TM, IT,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
	C7 047	CF,	,	•	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	-	TG		
						20030730					02		20021220 20021220				
,	EP 146	7736 AT.					2004 ES,								_	0021: MC,	

		IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK	
	JP 200	65037	96		T		2006	0202		JP 2	003-	5595	16		20	021220
	US 200	50194	24		A1		2005	0127	i	US 2	004-	4989	35		20	040616
PRAI	US 200	1-344	294P		P		2001	1221								
	WO 200	2-US4	1145		W		2002	1220								
os	MARPAT	139:	1116	40										-		

- The invention discloses the use of substituted fused or unfused pyridazine or AΒ pyridine derivs. which are KDR inhibitors in combination with other chemotherapeutic agents for use in treatment of diseases associated with abnormal angiogenesis and/or hyperpermeability and/or hyperproliferative diseases, e.g. cancer.
- 258850-91-8 ΙT RL: PAC (Pharmacological activity); BIOL (Biological study) (anti-angiogenesis combination therapies using KDR inhibitor pyridazine or pyridine derivs.)
- 258850-91-8 CAPLUS RN 1-Isoquinolinamine, N-(4-chlorophenyl)-4-(4-pyridinylmethyl)- (9CI) CN INDEX NAME)

- ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN L6
- ΑN 2001:851122 CAPLUS Full-text
- DN 135:371759
- Preparation of N-imidazolylphenyl-5,6-dihydrobenzo[h]quinazolin-4-amines TΙ and other N-containing heterocyclic amines as 5-hydroxytryptamine antagonists for treatment of CNS disorders
- Yamada, Akira; Spears, Glen; Hayashida, Hisashi; Tomishima, Masaki; Ito, IN Kiyotaka; Imanishi, Masashi
- Fujisawa Pharmaceutical Co., Ltd., Japan PΑ
- SO PCT Int. Appl., 154 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.	CNT 1																
	PATENT	NO.			KIN	D DA	TE		APPL	ICAT:	ION I	NO.		D	ATE		
ΡI	WO 200	10878	45		A2	20	011122		WO 2001-JP4002						20010514		
	WO 200	10878	45		A3	20	020829										
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		CR,	CU,	CZ,	DE,	DK, D	M, DZ,	ĒΕ,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	
		HU,	ID,	IL,	IN,	IS, J	P, KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	
		LV,	MA,	MD,	MG.	MK, M	N, MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	

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SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    AU 2001056728
                                20011126
                                            AU 2001-56728
                          Α5
    US 2003176454
                                            US 2002-258582
                                                                     20021101
                          Α1
                                 20030918
PRAI AU 2000-7501
                                 20000515
                          Α
    AU 2000-1955
                          Ά
                                 20001207
    WO 2001-JP4002
                          W
                                 20010514
OS
    MARPAT 135:371759
GΙ
```

Title compds. AMQNHZ [I; wherein A = H, (un) substituted, unsatd., N-containing AΒ heterocyclic group, or C(NH)NHR; R = (un)substituted aryl or heterocyclic group; M = (CH2)n, (CH2)nO(CH2)m, or (CH2)nNH(CH2)m; n and m = independently0-2; Q = (un)substituted cycloalkylene group, arylene, or divalent heterocyclic group; Z = (un)substituted, unsatd., mono-, di-, tri-, or tetracyclic, N-containing heterocyclic group which may contain addnl. N, O, and S atoms as the ring member(s), e.g. indeno[1,2,3- de]phthalazinyl or 5,6dihydrobenzo[h]quinazolinyl; and the prodrugs or pharmaceutically acceptable salts thereof] were prepared For example, a mixture of 4-chloro-5,6dihydrobenzo[h]quinazoline, 3-(1,2-dimethyl-1H- imidazol-5-yl)aniline, and 1,3-dimethyl-2-imidazolidinone was heated for an hour at 200°C, cooled, treated with 1N aqueous NaOH and water, and worked up to give II. $\,$ I are 5- $\,$ hydroxytryptamine (5-HT) antagonists useful for the prevention and/or treatment of central nervous system (CNS) disorders, such as anxiety, depression, obsessive compulsive disorders, migraine, anorexia, Alzheimer's disease, sleep disorders, bulimia, panic attacks, withdrawal from drug abuse, schizophrenia, and disorders associated with spinal trauma and/or head injury (no data).

IT 374556-53-3P, 4-Benzyl-N-[3-(1,2-dimethyl-1H-imidazol-5-yl)phenyl]-1-isoquinolinamine

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-(imidazolylphenyl)dihydrobenzo[h]quinazolinamines and other N-containing heterocyclic amines as 5-hydroxytryptamine antagonists for treatment of CNS disorders)

RN 374556-53-3 CAPLUS

CN 1-Isoquinolinamine, N-[3-(1,2-dimethyl-1H-imidazol-5-yl)phenyl]-4-(phenylmethyl)- (9CI). (CA INDEX NAME)

Me
$$_{N}$$
 $_{NH}$ $_{NH}$ $_{CH_{2}-Ph}$

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L6
    ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ΑN
     2001:597986 CAPLUS Full-text
DN
     135:180710
TI
     Preparation of isoquinolinamines inhibiting angiogenesis and/or VEGF
     receptor tyrosine kinase
IN
     Bold, Guido; Manley, Paul William
     Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft
PA
    m.b.H.
     PCT Int. Appl., 98 pp.
SO
    CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
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                                          WO 2001-EP1331
                         A1
    WO 2001058899
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
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                                20010820 AU 2001-31710
                                                                    20010207
    EP 1254138
                          A1
                                20021106
                                            EP 2001-903716
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    EP 1254138
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                          В1
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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    JP 2003522773
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                                            JP 2001-558449
                                                                    20010207
    AT 295365
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                                            AT 2001-903716
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    PT 1254138
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                                            PT 2001-903716
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    ES 2241781
                         Т3
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                                            ES 2001-1903716
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    US 2003158409
                         A1
                                20030821
                                            US 2002-203579
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                                20060224
                                            HK 2003-103231
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    US 2004209894
                          A1
                                20041021
                                            US 2004-766181
                                                                    20040127
PRAI CH 2000-265
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                                20000209
    WO 2001-EP1331
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                                20010207
    US 2002-203579
                          Α1
                                20021011
OS
    MARPAT 135:180710
GI
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$$\begin{array}{c}
X \downarrow^{CR1R1} \uparrow_{n-Y} \\
\downarrow^{N} \downarrow^{R2} \\
\downarrow^{R} \downarrow^{$$

The title compds. [I; A, D, T = N, CH, CR4 (with the proviso that at least one of A and D = CR4 when T = N); R4 = alkyl, alkenyl, alkylthio, etc.; B, E = N, CH; G = alkylene, alkenylene, CH2OCH2, etc.; n = 0-2; Q = alkyl, whereby A, D and T are not substituted by Q if they represent CR4; r = 0-5; R1, R11 = H, alkyl; R2, R3 = alkyl; or R2 and R3 together form a bridge to form isoquinoline, naphthyridine, etc.; X = NR5, O, S; R5 = H, alkyl; Y = H, aryl, heterocyclyl, etc.], useful for the treatment of a disease which responds to an inhibition of angiogenesis, were prepared and formulated. E.g., a multistep synthesis of II which showed IC50 of 0.105 μ M against KDR VEGF-receptor tyrosine kinase, was given.

IT 355013-23-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of isoquinolinamines inhibiting angiogenesis and/or VEGF receptor tyrosine kinase)

RN 355013-23-9 CAPLUS

CN 1-Isoquinolinamine, 4-[(6-methoxy-3-pyridinyl)methyl]-N-[trans-4-(1-methylethyl)cyclohexyl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:247328 CAPLUS Full-text

DN 134:266326

TI Preparation of substituted pyridines and pyridazines with angiogenesis inhibiting activity for pharmaceutical use as antitumor agents

```
IN
     Dumas, Jacques P.; Joe, Teddy Kite; Kluender, Harold C. E.; Lee, Wendy;
     Nagarathnam, Dhanapalan; Sibley, Robert N.; Su, Ning; Boyer, Stephen
     James; Dixon, Julie A.
PA
     Bayer Corporation, USA
SO
     PCT Int. Appl., 120 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
PΙ
     WO 2001023375
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                                             CN 2005-10127110
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                          Α
                                 20020523
                                             NO 2002-1520
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     ZA 2002002760
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                                             IN 2002-MN458
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                          Α.
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PRAI US 1999-407600
                                 19990928
                          Α
     CN 2000-816369
                          A3
                                 20000926
     WO 2000-US26500
                          W
                                 20000926
OS.
     MARPAT 134:266326
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$$\begin{array}{c} XR4 \\ N \\ 2 \\ YR3 \end{array} \qquad I \qquad \qquad \begin{array}{c} C1 \\ NH \\ N \\ N \\ N \end{array}$$

GΙ

Fused ring systems with a pyridine or pyridazine subunit, such as I [X = connecting group, such as O, S, NH, etc.; Y = connecting group, such as O, S, CH2O, CH2S, NH, OCH2, SCH2, SO, SO2, etc.; Z = CH, N; R1R2 = fused ring, such as CH:CHCH:CH, CH:CHS, CH:CHO, CH:CHNH, N:CHNH, N:NNH, etc.; R3, R4 = aryl, heteroaryl, etc.; XR4 = nitrogen bound heterocyclyl, such as 1-indolinyl], with angiogenesis inhibiting activity were prepared for pharmaceutical use as antitumor agents. Thus, substituted isoquinoline II was prepared in a 3 step sequence which included bromination of isocarbostyril to form 1,4-dibromoisoquinoline in 96% yield, followed by monoamination with 4-chloroaniline to give 4-bromo-N-(4-chlorophenyl)-1- isoquinolinamine in 64.4% yield, and subsequent reaction with 4-mercaptopyridine to give II in 19% yield. The prepared compds. were tested for KDR receptor inhibition.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of substituted pyridines and pyridazines with angiogenesis inhibiting activity for pharmaceutical use as antitumor agents)

RN 258850-91-8 CAPLUS

CN 1-Isoquinolinamine, N-(4-chlorophenyl)-4-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:31464 CAPLUS Full-text

DN 134:100762

TI Preparation of pyridine derivatives and medicinal use thereof

In Iino, Yukio; Fujita, Kohichi; Kodaira, Ariko; Hatanaka, Toshihiro; Takehana, Kenji; Kobayashi, Tsuyoshi; Konishi, Atsushi; Yamamoto, Takashi

PA Ajinomoto Co., Inc., Japan

SO PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2001002359 A1 20010111 WO 2000-JP4298 20000629

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,

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HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
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                                             EP 2000-940879
                                 20020403
     EP 1193255
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
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     MARPAT 134:100762
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$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \end{array} \begin{array}{c} \text{N} \\ \text{SCH}_2 \\ \end{array} \begin{array}{c} \text{NHCO} \\ \text{Me} \\ \end{array} \begin{array}{c} \text{Me} \\ \text{I} \\ \end{array}$$

Heterocyclic compds. represented by the following general formula R1-CO-N(R2)-AΒ A-X-B-N(R3)-Y-(CH2)n-R4 [R1 = (un)substituted or cycloalkenyl; R2, R3 = H, alkyl; R4 = (un)substituted alkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, or heterocyclyl having ≥ 1 heteroatom(s); A = (un)substituted heterocyclic ring; B = (un)substituted aromatic or heterocyclic ring; n = 0-6; Y = a bond between atoms, CO, CO2, CONR5, C(S)NR5, SO, SO2 (wherein R5 = H, alkyl); X = a bond between atoms, O, OCHR7, CHR8O, O2C, CO2, OC(S), C(S)O, S, SO, SO2, SCHR9, CHR10S, SC(0), C(0)S, SC(S), C(S)S, SO2 NR11, NR12SO2, NR13, etc.; R7 - R10 = H, alkyl; R11 - R13 = H, alkyl, acyl] or pharmacol. acceptable salts thereof are prepared These compds. have inhibitory effects on AP-1 activity, NF-kappa B activity, inflammatory cytokine production, matrix metalloprotease production, expression of inflammatory cell adhesion factor, etc. and are usable as drugs such as antiinflammatory, antirheumatic, antiviral agents, immunosuppressants, cancer metastasis inhibitors, and antiarteriosclerotics. Thus, 2-mercapto-5-nitropyridine was treated with NaH in DMF and then alkylated by 1-bromomethyl-4-nitrobenzene at room temperature for 1.5 h to give 2-(4-nitrobenzylthio)-5-nitropyridine which was reduced by Zn/AcOH in THF at room temperature for 16 h to 2-(4-aminobenzylthio) - 5-aminopyridine and then acylated by 2,2-dimethylcyclopropanecarbonyl chloride in the presence of Et3N in CH2Cl2 at room temperature for 17 h to give 2-(4-(2,2dimethylcyclopropanecarbonylamino)benzylthio)-5-(2,2dimethylcyclopropanecarbonylamino)pyridine (I). I in vitro inhibited NF-kappa B activity with IC50 of 0.015 $\mu g/mL$ in an assay measuring $\beta\text{-galactosidase}$ activity expressed in HUVEC cells and driven by NF-kappa B-binding sequencefused SV40 T antigen min. promoter. 318967-18-9P TT

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridine derivs. as inhibitors of AP-1 activity, NF-kappa B activity, inflammatory cytokine production, matrix metalloprotease production,

expression of inflammatory cell adhesion factor)

318967-18-9 CAPLUS RN

CN o]phenyl]methyl]-2-pyridinyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN L6

2000:133671 CAPLUS Full-text ΑN

132:166131 DN

Preparation of isoquinolines with angiogenesis inhibiting activity ΤI

Altmann, Karl-Heinz; Bold, Guido; Manley, Paul William IN

Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H PΑ

PCT Int. Appl., 74 pp. SO

CODEN: PIXXD2

DT Patent

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LA English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE																	
r Aiv.		NO.			KIND DATE			i	APPL	ICAT:	ION I	NO.		DATE 			
ΡI	WO 2000	00094	-				2000	0224		WO 1	999-1	EP57	81		19	9908	309
	W:	AE,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
		CZ,	DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,
		IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,
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	AU 9956	5202			A1		2000	0306	AU 1999-56202						19990809		
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	EP 110	7964			A1		2001	0620	C.D.	EP I	999-	9428	<i>L I</i>	NIT	C.E.	MC	פטט יייס
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00	WO 1999-EP5781 W 19990809 S MARPAT 132:166131																
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The title compds. [I; r = 0-2; n = 0-2; m = 0-4; A, B, D, E = N, CH (with the proviso that not more than two of those radicals are N); G = alkylene, CH2O, CH2S, etc.; Q = alkyl, especially methyl; R = H, alkyl; X = NH, O, S; Y = alkyl, especially, aryl, heteroaryl, (un)substituted cycloalkyl; Z = (un)substituted NH2, halo, alkyl, etc.; the bonds indicated by a wavy line are either single bonds or double bonds] which inhibit especially angiogenesis, were prepared and formulated. E.g., a multi-step synthesis of II which showed IC50 of 0.802 μ M against Flt-1 VEGF receptor tyrosine kinase, was given.

258850-90-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of isoquinolines with angiogenesis inhibiting activity)

RN 258850-90-7 CAPLUS

CN 1-Isoquinolinamine, N-(3,5-dimethylphenyl)-4-(4-pyridinylmethyl)- (9CI) (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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